2014 Yard Waste Hauling -SPU Hauling vs Processor Hauling

This overview accompanies the 'SPU Yard Waste Hauling' workbook and summarizes SPU's methodology for comparing future yard waste hauling options for SPU's future processing sites in Stanwood and Elk Heights (near Ellensburg).

Table 1. 2011 SPU Yard Waste Hauling Costs

- SPU included 2011 actual hauling expenses that are expected to be variable;
 that is, expenses expected to change with increases or decreases in volume of hauling.
- SPU labor, fuel and maintenance expenses for hauling are shared by garbage, yard waste and recycling hauling. Shares of these combined expenses are then allocated to yard waste hauling as described in the table.
- Capital expenses are the annual cost of the relevant hauling equipment (all yard waste trailers and 5.7 trucks). SPU estimates this annual (or depreciation) cost based on the purchase price for each asset spread out over the expected life.
- The expenses do not include station capital, other facility costs, overhead or administrative costs.
- These total variable expenses are divided by the hauled 2011 yard waste tons to provide an estimate of variable SPU costs per ton (\$21.88/ ton). Adjusted for inflation, these estimated SPU variable costs are projected to be \$23.22/ton in 2014.

Table 2. Projected 2014 Yard Waste Hauling Costs

2014 Hauling to Cedar Grove (for comparison)

In row C.1, the projected 2014 SPU hauling cost is \$397/load (based on the \$23.22/ton SPU cost from Table 1 multiplied by an average current load weight of 17.1 tons). This is the average cost per load for hauling to both Cedar Grove sites (with an average round trip of 55 miles).

2014 Hauling to Lenz in Stanwood

- Row L.1 provides the estimated payments to Lenz for hauling to Stanwood from the North Station. The Lenz hauling payments will be \$403 per load (to handle 35% to 40% of Seattle's yard waste). The total hauling payment to Lenz is projected to be \$0.6M for 2014 (based on 38,000 tons, divided by 25 tons/load, and multiplied by \$403/load).
- Row L.2 estimates the cost of SPU hauling to Stanwood from North Station.
 The SPU load cost of \$397/load (from C.1) is adjusted for the longer trips multiplying by the distance ratio (105 round trip miles divided by 55 round trip

- miles). The resulting projected SPU cost to Stanwood is **\$758/load**. The projected total SPU hauling costs is **\$1.7M for 2014** (based on 38,000 tons, divided by the current 17 tons/load, multiplied by \$758/load).
- Row L.3 provides the cost of SPU hauling to Stanwood with 25 ton loads. The load cost of \$758/load is the same, but total cost for hauling 40% of tons is reduced to \$1.2M in 2014 (based on 38,000 tons, divided by 25 tons/load, and multiplied by \$758/load).

2014 Hauling to PacifiClean via Maple Valley

- PacifiClean did not provide a processing only price at Elk Heights or separate hauling only price to Elk Heights (near Ellensburg). Therefore, SPU cannot compare SPU hauling the to the Elk Heights facility vs. PacifiClean hauling.
- PacifiClean did provide a combined price of \$45.91/ton to process and haul from Seattle to Elk Heights and a combined price of \$45.41/ton to process and haul from Maple Valley to Elk Heights. This analysis focuses on combined hauling <u>and</u> processing options at PacifiClean for relevant comparison.
- Row P.1 provides the projected cost of PacifiClean hauling to Elk Heights <u>with</u> processing. The total projected hauling and processing cost for 60% of Seattle tons is \$2.9M in 2014 (based on 57,000 tons and a combined haul & process price of \$49.50/ton).
- Row P.2 provides the projected costs of SPU hauling to Maple Valley with PacifiClean hauling the remaining trip to Elk Heights and processing. The SPU hauling cost of \$397/load (from C.1) is reduced by the ratio of the round trip miles to Maple Valley vs current average round trips (42 miles divided by 55 miles). The resulting projected hauling cost is \$303/load and total hauling and processing costs are projected to be \$3.6M in 2014 (based on 57,000 tons, 17 tons/load, \$303/load, and \$45.41/ton for long-haul and processing).
- Row P.3 provides projected costs for SPU hauling to Maple Valley (with 25 ton loads) and PacifiClean then hauling to Elk Heights and processing. The load cost of \$303/load is the same, but the total hauling and processing costs are reduced to \$3.3M in 2014 with the heavier hauling loads (based on 57,000 tons, 25 tons/load, \$303/load, and \$45.41/ton for long-haul and processing).
- Row P.4 provides the projected costs of SPU hauling to Elk Heights (with 25 ton loads). The base SPU hauling costs of \$397/load (from C.2) is adjusted for the new distance by ratio of 198 round trip miles to the 55 current miles, resulting in SPU hauling cost to Elk Heights of \$1,430/load. SPU cannot calculate the total hauling and processing cost for this scenario, absent a processing only price, but the hauling only costs are projected to be \$3.3M in 2014.